Claim Listing

This listing of the claims will replace all prior versions, and listings, of claims in the application.

Claims 1-67 (canceled)

Claim 68 (currently amended): A liquid droplet deposition system, comprising:

- a holding mechanism;
- a plurality of capillaries, held by the holding mechanism;
- a sample plate holder positioned beneath the plurality of capillaries;
- a high pressure liquid chromatography (HPLC) source in fluid communication with the capillaries, which HPLC source causes a liquid to flow through and form a droplet at an end of each capillary; and

a power supply that includes a voltage source and is configured to generate an electric field between each capillary and a sample plate by applying: a) a charge to the sample plate when said sample plate is placed on the sample plate holder, and b) a ground connection to wherein when a the droplet of liquid after said droplet forms at an the end of the capillary,

wherein when the electric field is generated, the droplet is grounded and is pulled to the sample plate along the electric field.

Claim 69 (previously presented): The liquid droplet deposition system of claim 68, wherein each capillary comprises:

a holding column for containing a liquid from which the liquid droplet is formed; and

a capillary, connected at a first end to the holding column, and including an open tip at a second end for providing the droplets.

Claim 70 (previously presented) The liquid droplet deposition system of claim 68, wherein the sample plate holder is movable.

Claim 71 (previously presented) The liquid droplet deposition system of claim 68, further comprising a motion table upon which is situated one or more sample plate holders.

Claim 72 (previously presented) The liquid droplet deposition system of claim 68, further comprising means for moving a sample plate that is positioned on the sample plate holder to a target position.

Claim 73 (canceled)

Claim 74 (previously presented) The liquid droplet deposition system of claim 68, wherein the system comprises an electrode plate through which the charge is applied indirectly to the sample plate.

Claim 75 (previously presented) The liquid droplet deposition system of claim 68, wherein the system comprises an electrical connection which grounds a liquid droplet at the tip of the capillary.

Claim 76 (previously presented) The liquid droplet deposition system of claim 68, wherein the system comprises electrical connections between a power supply and each of a plurality of capillaries.

Claim 77 (currently amended) A liquid droplet deposition system, comprising:

a holding mechanism;

a plurality of capillaries, held by the holding mechanism;

a sample plate holder positioned beneath the plurality of capillaries; and

a power supply that includes a voltage source and is configured to generate

an electric field between each capillary and a sample plate by applying: a) a charge to the sample plate when said sample plate is placed on the sample plate holder, and b) a ground connection to a droplet of liquid after said droplet is formed at an end of the capillary. The liquid droplet deposition system of claim 68, wherein the system comprises electrical connections between a the power supply and each region of an array of sample deposition sites, thereby allowing the independent application of a charge to different parts of a sample plate that is positioned on the sample plate holder.

wherein when the electric field is generated, the droplet is pulled to the sample plate along the electric field.

Claim 78 (previously presented) The liquid droplet deposition system of claim 68, wherein the power supply further includes a ground connection for grounding the liquid droplet.

Claim 79 (previously presented) The liquid droplet deposition system of claim 68, wherein the power supply includes a voltage source.

Claim 80 (previously presented) The liquid droplet deposition system of claim 68, further comprising a controller.

Claim 81 (previously presented) The liquid droplet deposition system of claim 68, wherein the capillary is connected to a liquid chromatography column.

Claim 82 (new) The liquid droplet deposition system of claim 68, wherein the flow rate through a capillary regulates the size of the liquid droplet.

Claim 83 (new) A liquid droplet deposition system, comprising:

- a holding mechanism;
- a plurality of capillaries, held by the holding mechanism;
- a sample plate holder positioned beneath the plurality of capillaries;
- a high pressure liquid chromatography (HPLC) source in fluid communication with the capillaries, which HPLC source causes a liquid to flow through and form a droplet at an end of each capillary; and

a power supply that includes a voltage source and is configured to generate an electric field between each capillary and a sample plate when said sample plate is placed on the sample plate holder,

wherein when the electric field is generated, the droplet is pulled to the sample plate along the electric field.

Claim 84 (new) The liquid droplet deposition system of claim 83, wherein the electric field is generated by applying: a) a ground connection to the sample plate, and b) a charge to the droplet of liquid after said droplet forms at the end of the capillary.

Claim 85 (new) The liquid droplet deposition system of claim 83, wherein the electric field is generated by applying: a) a charge to the sample plate, and b) a ground connection to the droplet of liquid after said droplet forms at the end of the capillary.

Claim 86 (new) The liquid droplet deposition system of claim 83, wherein the system further comprises at least one liquid chromatography column in fluid communication with at least one of the capillaries.

Claim 87 (new) The liquid droplet deposition system of claim 83, wherein the flow rate through a capillary regulates the size of the liquid droplet.